

# FUELS FOR HYPERSONIC FLIGHT VEHICLES

L.S. Yanovskiy  
Central Institute of Aviation Motors (CIAM)  
2, Aviamotornya Street  
Moscow-111116, Russia  
Email : [yanovskiy@ciam.ru](mailto:yanovskiy@ciam.ru)

## Abstract

Airframe integrated Scramjet engine is widely accepted as the propulsion candidate for propelling Hypersonic flight vehicles. Endothermic fuel is perhaps the inevitable solution for long duration actively cooled engine to drive the high speed vehicles. Characterisation of endothermic fuel has been addressed in this article emphasising the role of thermal decomposition process and the means to intensify the process. Fuel coking aspect and selection of materials has also been included in the discussion.